# User's Manual Bedienungsanleitung Manuel d'utilisation

# FlexScan<sup>®</sup> L760T-C

Touch Panel Color LCD Monitor LCD-Farbmonitor mit Touch-Panel Moniteur couleur LCD à écran tactile

## **Important**

Please read this User's Manual carefully to familiarize yourself with safe and effective usage. Please retain this manual for future reference.

## Wichtig

Bitte lesen Sie diese Bedienungsanleitung sorgfältig durch, um sich mit dem sicheren und rationellen Betrieb dieses Produkts vertraut zu machen. Bewahren Sie das vorliegende Handbuch zu Referenzzwecken auf.

## **Important**

Veuillez lire attentivement ce Manuel d'utilisation afin de vous familiariser avec ce produit et de l'utiliser efficacement et en toute sécurité. Veuillez conserver ce manuel pour référence ultérieure.



## For U.S.A, Canada, etc. (rated 100-120 Vac) Only

## **FCC Declaration of Conformity**

We, the Responsible Party <u>EIZO Inc.</u>

5710 Warland Drive, Cypress, CA 90630

Phone: (562) 431-5011

declare that the product Trade name: EIZO

Model: FlexScan L760T-C

is in conformity with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- \* Reorient or relocate the receiving antenna.
- \* Increase the separation between the equipment and receiver.
- \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Note

Use the attached specified cable below or EIZO signal cable with this monitor so as to keep interference within the limits of a Class B digital device.

- AC Cord
- Shielded Signal Cable
- Stereo mini-jack cable

#### Canadian Notice

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de le classe B est comforme à la norme NMB-003 du Canada.

# User's Manual

# FlexScan® L760T-C

**Touch Panel Color LCD Monitor** 

It shall be assured that the final system is in compliance to IEC60601-1-1 requirement.

## SAFETY SYMBOLS

This manual uses the safety symbols below. They denote critical information. Please read them carefully.



## **WARNING**

Failure to abide by the information in a WARNING may result in serious injury and can be life threatening.



## **CAUTION**

Failure to abide by the information in a CAUTION may result in moderate injury and/or property or product damage.



Indicates a prohibited action.



Indicates to ground for safety.

- This product has been adjusted specifically for use in the region to which it was originally shipped. If operated outside this region, the product may not perform as stated in the specifications.
- Power supplied equipment can emit electromagnetic waves, that could influence, limit or result in malfunction of the monitor. Install the equipment in a controlled environment, where such effects are avoided.
- This is a monitor intended for use in a medical imaging system. It does not support the display of mammography images for diagnosis.

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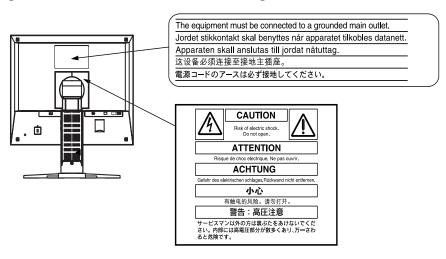
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# **APRECAUTIONS**

#### **IMPORTANT!**

- This product has been adjusted specifically for use in the region to which it was originally shipped. If operated outside the region to which it was originally shipped, the product may not perform as stated in the specifications.
- To ensure personal safety and proper maintenance, please read this section and the caution statements on the unit (refer to the figure below).

#### [Location of the Caution Statements]



## [Symbols on the unit]

| Symbol | Location      | This symbol indicates                           |
|--------|---------------|---|
|        | Front         | Power button                                    |
|        | Control panel | Press to turn the monitor's power on or off.    |
|        | Rear          | Alternating current                             |
| ~      | Name Plate    |   |
| Â      | Rear          | Alerting electrical hazard                      |
|        | Rear          | Caution   |
|        |               | Refer to SAFETY SYMBOLS section in this manual. |

# **⚠** WARNING

If the unit begins to emit smoke, smells like something is burning, or makes strange noises, disconnect all power connections immediately and contact your dealer for advice.

Attempting to use a malfunctioning unit may result in fire, electric shock, or equipment damage.

#### Do not open the cabinet or modify the unit.

Opening the cabinet or modifying the unit may result in fire, electric shock, or burn.



#### Refer all servicing to qualified service personnel.

Do not attempt to service this product yourself as opening or removing covers may result in fire, electric shock, or equipment damage.

#### Keep small objects or liquids away from the unit.

Small objects accidentally falling through the ventilation slots into the cabinet or spillage into the cabinet may result in fire, electric shock, or equipment damage.

If an object or liquid falls/spills into the cabinet, unplug the unit immediately. Have the unit checked by a qualified service engineer before using it again.



#### Place the unit at the strong and stable place.

A unit placed on an inadequate surface may fall and result in injury or equipment damage.

If the unit falls, disconnect the power immediately and ask your dealer for advice. Do not continue using a damaged unit. Using a damaged unit may result in fire or electric shock.



#### Use the unit in an appropriate location.

Not doing so may result in fire, electric shock, or equipment damage.

- \* Do not place outdoors.
- \* Do not place in the transportation system (ship, aircraft, trains, automobiles, etc.)
- \* Do not place in a dusty or humid environment.
- \* Do not place in a location where water is splashed on the screen (bathroom, kitchen, etc.).
- \* Do not place in a location where the steam comes directly on the screen.
- \* Do not place near heat generating devices or a humidifier.
- \* Do not place in a location where the product is subject to direct sunlight.
- \* Do not place in an inflammable gas environment.





## lack N WARNING

To avoid danger of suffocation, keep the plastic packing bags away from babies and children.

# Use the enclosed power cord and connect to the standard power outlet of your country.

Be sure to remain within the rated voltage of the power cord.

Not doing so may result in fire or electric shock.

Power Supply: 100-120/200-240 Vac 50/60Hz

#### To disconnect the power cord, grasp the plug firmly and pull.

Tugging on the cord may damage and result in fire or electric shock.





#### The equipment must be connected to a grounded main outlet.

Failure to do so may result in fire or electric shock.



#### Use the correct voltage.

- \* The unit is designed for use with a specific voltage only. Connection to another voltage than specified in this User's Manual may cause fire, electric shock, or equipment damage.
  - Power Supply: 100-120/200-240 Vac 50/60Hz
- \* Do not overload your power circuit, as this may result in fire or electric shock.

#### Handle the power cord with care.

- \* Do not place the cord underneath the unit or other heavy objects.
- \* Do not pull on or tie the cord.

If the power cord becomes damaged, stop using it. Use of a damaged cord may result in fire or electric shock.



# For the electrical safety, do not connect or disconnect the power cord in the presence of patients.

#### Never touch the plug and power cord if it begins to thunder.

Touching them may result in electric shock.



# When attaching an arm stand, please refer to the user's manual of the arm stand and install the unit securely.

Not doing so may cause the unit to become unattached, which may result in injury or equipment damage. Before installation, make sure that desks, walls, and others an arm stand is fixed on have adequate mechanical strength. When the unit is dropped, please ask your dealer for advice. Do not continue using a damaged unit. Using a damaged unit may result in fire or electric shock. When reattaching the tilt stand, please use the same screws and tighten them securely.

# $oldsymbol{\Delta}$ warning

#### Do not touch a damaged LCD panel directly with bare hands.

The liquid crystal that may leak from the panel is poisonous if it enters the eyes or mouth.

If any part of the skin or body comes in direct contact with the panel, please wash thoroughly.



If some physical symptoms result, please consult your doctor.

#### Fluorescent backlight lamps contain mercury (the products that have LED backlight lamps contain no mercury), dispose according to local, state or federal laws.

Exposure to elemental mercury can result in effects on the nervous system, including tremor, memory loss, and headache.



## $oldsymbol{\triangle}$ CAUTION

#### Handle with care when carrying the unit.

Disconnect the power cord and cables when moving the unit. Moving the unit with the cord attached is dangerous. It may result in injury.

#### When handling the unit, grip the bottom of the unit firmly with both hands ensuring the panel faces outward before lifting.

Dropping the unit may result in injury or equipment damage.



#### Do not block the ventilation slots on the cabinet.

- \* Do not place any objects on the ventilation slots.
- \* Do not install the unit in a closed space.
- \* Do not use the unit laid down or upside down.

Blocking the ventilation slots prevents proper airflow and may result in fire, electric shock, or equipment damage.



#### Do not touch the plug with wet hands.

Doing so may result in electrical shock.



#### Use an easily accessible power outlet.

This will ensure that you can disconnect the power quickly in case of a problem.

#### Periodically clean the area around the plug.

Dust, water, or oil on the plug may result in fire.

#### Unplug the unit before cleaning it.

Cleaning the unit while it is plugged into a power outlet may result in electric shock.





If you plan to leave the unit unused for an extended period, disconnect the power cord from the wall socket after turning off the power switch for the safety and the power conservation.

This product is only suitable for a patient environment, but not for contact with a patient.

#### Notice for this monitor

This product is suited to general purposes like creating documents, viewing multimedia content.

Monitors should be set to a lower brightness to reduce changes in luminosity caused by long-term use and maintain a stable display.

The LCD panel is manufactured using high-precision technology. Although, missing pixels or lit pixels may appear on the LCD panel, this is not a malfunction. Percentage of effective dots: 99.994% or higher.

The backlight of the LCD panel has a fixed life span. When the screen becomes dark or begins to flicker, please contact your dealer.

Do not scratch or press on the panel with any sharp objects, as this may result in damage to the panel. Do not attempt to brush with tissues as this may scratch the panel.

When the screen image is changed after displaying the same image for extended periods of time, an afterimage may appear. Use the screen saver or power save function to avoid displaying the same image for extended periods of time.

When the monitor is cold and brought into a room or the room temperature goes up quickly, dew condensation may occur on the interior and exterior surfaces of the monitor. In that case, do not turn the monitor on. Instead wait until the dew condensation disappears, otherwise it may cause some damage to the monitor.

## To use the monitor comfortably

An excessively dark or bright screen may affect your eyes. Adjust the brightness of the monitor according to the environmental conditions.

Staring at the monitor for a long time tires your eyes. Take a 10-minute rest every hour.

# 1. INTRODUCTION

Thank you very much for choosing an EIZO Color Monitor.

## 1-1. Features

• Dual inputs compliant

• DVI (p.34) Digital input (TMDS (p.35)) compliant.

• Horizontal scanning frequency: Analog input 30 - 81 kHz

Digital input 30 - 65 kHz

Vertical scanning frequency: Analog input 49.5 - 75.5 Hz

Digital input 59 - 61 Hz (VGA text: 70 Hz)

1 M pixels (1280 dots x 1024 lines)

• Auto Adjustment compliant

• Support to sRGB (p.35) standard

The height adjustable stand incorporated

• Touch Panel provided

Resolution:

• Touch Panel Pointer "TP1" is available (optional, p.15)

## 1-2. Package Contents

Please contact your local dealer for assistance if any of the listed items are missing or damaged.

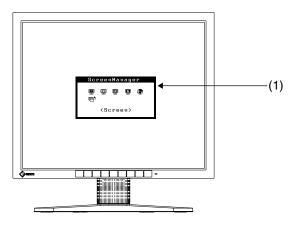
- LCD Monitor
- Power Cord
- Signal Cable (MD-C87)
- Touch Panel Cable (FD-C38)
- User's Manual
- ScreenManager Quick Reference
- LIMITED WARRANTY
- EIZO Touch Panel Disk (CD-ROM) (Contents: MT 7 (Touch Panel Driver), Installation Guide)

#### NOTE

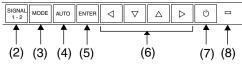
- Please retain the packing materials for future transference.
- For the touch panel driver installation procedure and cautions, refer to the Installation Guide on the CD-ROM.

## 1-3. Controls & Connectors

## **Front**

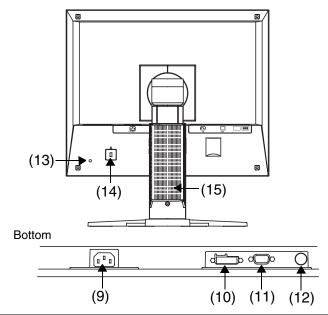


#### Control Panel



| (1)ScreenManage | er <sup>®</sup>                               | Monitor Adjustment menu (p.16)  |
|-----------------|---|---|
| (2)SIGNAL1-2    | Input Signal<br>Selection Button              | Switch the input signals when connecting 2 PCs. (p.15)  |
| (3)MODE         | Mode Button                                   | Show or switch the color mode. (p.23)   |
| (4)AUTO         | Auto Adjustment<br>Button                     | Adjust the screen to appropriate condition automatically. (analog input only)   |
| (5)ENTER        | Enter Button                                  | Show the ScreenManager on the screen.   |
|                 |   | Confirm the setting / adjustment function. Save the adjustment values.  |
| (6) ◁∇△▷        | Control Buttons<br>(Left, Down, Up,<br>Right) | Select the desired function.  Increase and decrease the adjustment value.   |
| (7) <b></b>     | Power Switch                                  | ON or OFF the monitor's power.  |
| (8)             | Power Indicator                               | Indicate monitor's operation status.  Blue: Operation  Flashing blue: Last 15 min. of operation time before entering the power off state. (p.18)  Flashing yellow slowly: Power off |

## Rear



| (9) 👊                   | Power Connector                             | Connect the power cord.  |  |
|-------------------------|---|--|--|
| (10) 🕠                  | DVI-D Connector<br>(SIGNAL1)                | Connect the optional digital cable.  |  |
| (11) 🗆                  | D-Sub mini 15 pin<br>Connector<br>(SIGNAL2) | Connect the enclosed analog cable (MD-C87)   |  |
| (12)                    | RS-232C port                                | Connect the enclosed touch panel cable (FD-C38).   |  |
| (13) Hole for TP1       |   | Hole for installing the lead of the TP1 (Optional Touch Panel Pointer).                                |  |
| (14) 🗹                  | Security Lock Slot                          | Allows for connection of a security cable. This lock supports Kensington's MicroSaver security system. |  |
| (15) Stand (Detachable) |   | The LCD monitor can be used with an other stand by removing the stand (see page 25).                   |  |

# 2. CABLE CONNECTION

## 2-1. Before connecting

Before connecting your monitor to the PC, change the display screen settings (resolution (p.35) and frequency) in accordance with the charts below.

## NOTE

- The lower display modes like 640x 480, automatically enlarge to the maximum display mode (1280 x 1024), and some lines of the characters may become fuzzy. In this case, use <Smoothing> function (p.22) to make the lines clear.
- When your computer and display support VESA DDC, the suitable resolution and the refresh rate are set by just plugging your display into the computer without any manual settings.

## **Analog Input**

| Resolution  | Frequency    | Dot Clock    | Remarks    |
|-------------|--------------|--------------|------------|
| 320 × 200   | 70 Hz        | 135 MHz(Max) | VGA Mode13 |
| 640 × 480   | $\sim$ 75 Hz |              | VGA, VESA  |
| 720 × 400   | 70 Hz        |              | VGA TEXT   |
| 800 × 600   | $\sim$ 75 Hz |              | VESA       |
| 1024 × 768  | $\sim$ 75 Hz |              | VESA       |
| 1152 × 864  | 75 Hz        |              | VESA       |
| 1280 × 960  | 60 Hz        |              | VESA       |
| 1280 × 1024 | $\sim$ 75 Hz |              | VESA       |

## **Digital Input**

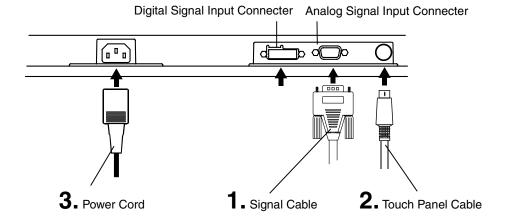
| Resolution  | Frequency | Dot Clock | Remarks  |
|-------------|-----------|-----------|----------|
| 640 × 480   | 60 Hz     | 109 MHz   | VGA      |
| 720 × 400   | 70 Hz     | (Max)     | VGA TEXT |
| 800 × 600   | 60 Hz     |           | VESA     |
| 1024 × 768  | 60 Hz     |           | VESA     |
| 1280 × 1024 | 60 Hz     |           | VESA     |

## 2-2. Connecting the signal cable

## NOTE

- Be sure that the power switches of both the PC and the monitor are OFF.
- 1. Plug the signal cable into the connector at the rear of the monitor and the other end of the cable into the video connector on the PC.

After connecting, secure the connection with the screw-in fasteners.



## **Analog Input**

| Signal Cable                    | Connector of PC                                   | PC                     |
|---------------------------------|---|------------------------|
| Signal Cable (enclosed, MD-C87) | Video Output<br>Connector/ D-Sub<br>mini 15 pin   | Standard graphics card |
|                                 | Input Connecor<br>(monitor)/ D-Sub<br>mini 15 pin |                        |

## **Digital Input**

| Signal Cable      | Connector of PC                  | PC                    |
|-------------------|----------------------------------|-----------------------|
| FD-C39 (Optional) | Video Output<br>Connector DVI-I  | Digital Graphics card |
|                   | Input Connecor<br>(monitor)/ DVI |                       |

**2.** Plug the enclosed touch panel cable (FD-C38) into the RS-232C port of the monitor. Then, plug the other end of the cable into the COM port of the PC.

**3.** Plug the power cord into the power connector on the rear of the monitor. Then, plug the other end of the cord into a power outlet.

## **AWARNING**

# Use the enclosed power cord and connect to the standard power outlet of your country.

Be sure to remain within the rated voltage of the power cord.

Not doing so may cause in fire or electric shock.

## The equipment must be connected to a grounded main outlet.



Not doing so may cause in fire or electric shock.

**4.** Turn on the monitor's main power and then switch on the PC's power.

The monitor's power indicator will light up (blue).

If an image does not appear, refer to the "6. TROUBLESHOOTING" (p.26) for advice.

**5.** Install the touch panel driver according to the instructions included in the EIZO Touch Panel Disk (CD-ROM).

## NOTE

 For the touch panel driver installation procedure and cautions, refer to the Installation Guide on the CD-ROM.

## NOTE

- Whenever finished, turn off the PC and the monitor. Disconnecting the monitor from the power supply is recommended to save energy completely.
- Adjust brightness of the screen depending on the brightness of your environment. Too dark or too bright of a screen can cause eyestrain.
- Be sure to take adequate rests. A 10-minute rest period each hour is suggested.

## 2-3. Touch Operation

Point and touch with one finger only.

#### NOTE

- Do not touch the screen while turning on the PC and the monitor. Touch the screen one second later after appearing the image.
- For the users with gloves, we recommend to use touch panel pointer, "TP1" (optional). Regarding the installation, please refer to the User's Manual of TP1.

## 2-4. Connecting two PCs to the monitor

Two PCs can be connected to the monitor through the DVI and the D-Sub mini 15 pin connector on the back of the monitor.

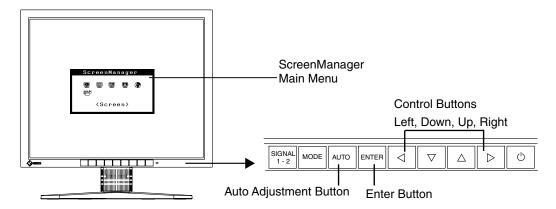
#### Selecting the active input

The Input Signal Selection Button on the control panel can be used to select either Signal 1 or Signal 2 as the active input at any time. Every time the button is pressed, the input changes. When switching the signal, the kind of the input signal (Signal1 or 2/Analog or Digital) is displayed for a few seconds on the right top corner of the screen.



# 3. ScreenManager

## 3-1. How to use the ScreenManager



## **1.** Entering the ScreenManager

Press the Enter Button once to display the main menu of the ScreenManager.

## 2. Making Adjustments and Settings

- (1) Select the desired sub menu icon using the Control Buttons and press the Enter Button. The sub menu appears.
- (2) Use the Control Buttons to select the desired setting icon and press the Enter Button. The setting menu appears.
- (3) Use the Control Buttons to make all required adjustments and press the Enter Button to save the settings.

## **3.** Exiting the ScreenManager

- (1) To return to the main menu, select the <Return> icon or press the Down Button twice, followed by the Enter Button.
- (2) To exit the ScreenManager, select <Exit> icon or press the Down Button twice, followed by the Enter Button.

## NOTE

• Double clicking the Enter Button at any time also exits the ScreenManager menu.

## 3-2. Adjustments and Settings

The following table shows all the ScreenManager's adjustment and setting menus. "\*" indicates adjustments of analog input only.

| Main menu   | Sub menu  |   | Reference  |  |
|-------------|---|---|--|--|
| Screen      | Clock   | * | 4-1. Screen Adjustment (p.20)  |  |
|             | Phase   | * |  |  |
|             | Position  | * |  |  |
|             | Range Adjustment  | * |  |  |
|             | Smoothing   |   |  |  |
| Color       | Brightness  |   | 4-2. Color Adjustment (p.23)   |  |
|             | Color Mode  |   |  |  |
|             | Custom  |   |  |  |
|             | Temperature   |   |  |  |
|             | Gamma   |   |  |  |
|             | Saturation  |   |  |  |
|             | Hue   |   |  |  |
|             | Gain  |   |  |  |
|             | Reset   |   |  |  |
|             | • sRGB  |   |  |  |
| Others      | Input Signal  |   | Set the input signal selection of automatic or manual (p.19)                                 |  |
|             | Off Timer   |   | Set the power save (p.18)  |  |
|             | VGA Selection   |   | Select the display mode. (p.27)  |  |
|             | Menu Position   |   | Adjust the menu position.  |  |
|             | Translucent   |   | Set the transparency of the menu.  |  |
|             | Menu Off Timer  |   | Set the menu displaying time.  |  |
|             | Reset   |   | Return to the factory default settings. (p.32)   |  |
| Information | Information   |   | Review the ScreenManager's settings, model name, serial number and usage time <sup>1</sup> . |  |
| Language    | English, German,<br>French, Spanish,<br>Italian and Swedish |   | Select the ScreenManager's language.   |  |

<sup>&</sup>lt;sup>\*1</sup> Due to the inspection on the factory, the usage time may not "0 hour" at shipping.

## 3-3. Useful Functions

## **Adjustment Lock**

Use the "Adjustment Lock" function to prevent any accidental changes.

| Locked function   | Auto Adjustment Button adjustments and settings in the<br>ScreenManager. |
|-------------------|--|
| Unlocked function | Adjustment of brightness by the Control Buttons.                         |
|                   | Input Signal Selection Button  |
|                   | Mode Button  |

#### [To lock]

- (1) Switch off the monitor's power by the power switch on the control panel.
- (2) Press on the Auto adjustment button while switching on the monitor's power.

#### [To unlock]

- (1) Switch off the monitor's power by the power switch on the control panel.
- (2) Hold down the Auto adjustment button once again and turn the power back on.

#### **Off Timer**

The off timer function causes the monitor to automatically enter a power off state after a predetermined amount of time has lapsed. This function was created to reduce afterimage characteristics that are particular to LCD monitors when the monitor screen is left on for a long period without use.

#### [Procedure]

- (1) Select <Off Timer> in the ScreenManager <Others> menu.
- (2) Select "Enable" and press the Right and Left Buttons to adjust the "On Period" (1 to 23 hours).

## [Off timer system]

| PC                          | Monitor           | Power Indicator        |
|-----------------------------|-------------------|------------------------|
| On Period (1H - 23H)        | Operation         | Blue                   |
| Last 15 min. in "On period" | Advance Notice 11 | Blue Flashing          |
| "On period" expired         | Power off         | Flashing yellow slowly |

Advance notice (Power Indicator flashing blue) will be given 15 minutes before the monitor automatically enters the "Power Off" mode. To delay entering the "Power Off" mode, press the power switch during the advance notice period. The monitor will continue to operate for an additional 90 minutes.

#### [Power Resumption Procedure]

Press the power switch.

## **EIZO Logo display**

Enables to display the EIZO logo for a while when switching on the monitor (Default is no logo). If you desire to display or undisplay this logo, use this function.

#### [To display]

- (1) Switch off the monitor's power by the Power switch on the control panel.
- (2) Hold down the Enter button once again and turn the power back on.

#### [To undisplay]

- (1) Switch off the monitor's power by the Power switch.
- (2) Hold down the Enter button once again and turn the power back on.

## Automatically selecting the input signal function

The monitor will automatically detect the inputted signal of either the connection for display.

## Connecting two PCs to the monitor

When the one computer is switched off, the monitor will automatically dislay the other signal.

Use the ScreenManager to switch the input selection to manual.

#### [Procedure]

- (1) Select <Input Signal> in the <Others> menu.
- (2) Select "Manual".

# 4. ADJUSTMENT

When digital signals are input, images are displayed correctly based on the preset data of the monitor, but if characters and/or lines appear blurred, go to step 5 [Smoothing]. When performing more advanced adjustment, see "4-2. Color Adjustment" (p.23) and subsequent pages.

## 4-1. Screen Adjustment

Screen adjustments for the LCD monitor should be used in suppressing screen flickering and also for adjusting the screen to its proper position. There is only one correct position for each display mode. It is also recommended to use the ScreenManager function when first installing the display or whenever changing the system.

## **Adjustment Procedure**

## NOTE

 Allow the LCD monitor to stabilize for at least 20 minutes before making image adjustments.

## **1.** Press the Auto Adjustment Button on the control panel.

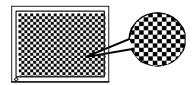
The message "Your setting will be lost, if you press again now." appears and remains on the screen for 5 seconds. While the message is on the screen, press the Auto Adjustment Button again to automatically adjust the clock, phase, and screen position. If you do not wish to do adjust the screen, do not press the Auto Adjustment Button again.

## NOTE

 The Auto Adjustment function is intended for use on AT-compatible PC running Windows. It may not work properly in either of the following cases.
 When running an AT-compatible PC on MS-DOS (Not windows). The background color for the "wall paper" or "desktop" pattern is set to black.

If the appropriate screen can not be made by using the Auto Adjustment Button, adjust the screen through the following procedures. If the appropriate screen can be made, proceed to step 4.

# 2. We recommend setting the desktop pattern to that as shown in the diagram below.



#### NOTE

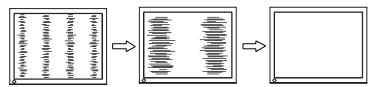
 More precise adjustment is available for using the "Screen Adjustment program" utility software. It can be downloaded from the EIZO homepage (http://www.eizo.com/).

## **3.** Adjust by using <Screen> menu in the ScreenManager.

- (1) Vertical bars appear on the screen
  - $\rightarrow \bigcirc$  Use the <Clock> (p.34) adjustment.

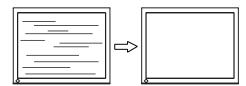
Select the <Clock> and eliminate the vertical bars by using the Right and Left of the Control Buttons.

Do not continuously press the Control Buttons, as the adjustment value will change quickly and make it difficult to locate the most suitable adjustment point. If the horizontal flickering, blur or bars appear, proceed to <Phase> adjustment as follows.



- (2) Horizontal bars appear on the screen.
  - $\rightarrow$  ① Use the <Phase> (p.34) adjustment.

Select the <Phase> and eliminate the horizontal flickering, blurring or bars by using the Right and Left Buttons.



#### NOTE

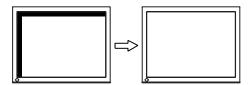
 Horizontal bars may not completely disappear from the screen depending on the PC. (3) The screen position is incorrect.

 $\rightarrow$  Use the <Position> adjustment.

The correct displayed position of the monitor is decided because the number and the position of the pixels are fixed. The "Position" adjustment moves the image to the correct position.

Select <Position> and adjust the position by using the Up, Down, Right and Left Buttons.

If vertical bars of distortion appear after finishing the <Position> adjustment, return to <Clock> adjustment and repeat the previously explained adjustment procedure. Clock→ Phase→ Position



- 4. To adjust the output signal range (Dynamic Range) of the signal.
  - $\rightarrow$  Use the <Range Adjustment> (p.35).

This controls the level of output signal range to display the whole color gradation (256 colors).

#### [Procedure]

Press the Auto Adjustment Button on the control panel while displaying the <Range Adjustment> menu to automatically adjust the range. The screen blanks for a moment, and adjusts the color range to display the whole color gradation of the current output signal.

- **5.** To smooth the blurred texts of the enlarged screen of the lower resolutions.
  - → III Switch the <Smoothing> setting.

<Smoothing> is clear-cut the letters or lines.

Select <Smoothing> in the screen menu and select the suitable level from  $1 \sim 5$ .

## NOTE

- The "Smoothing" is disabled in the resolution 1280 x 1024.
- Since the displayed image is enlarged, the blurred texts may not be necessarily lost completely.

## 4-2. Color Adjustment

In the analog input, perform the "Range Adjustment" (p.22) before making the color adjustments.

The <Color> menu in the ScreenManager enables to change the color of the screen. By using the <Color Mode>, the adjustment mode can be selected from <Custom mode> (to adjust the color settings according to your preference) and <sRGB> mode.

## NOTE

- Allow the LCD monitor to stabilize for at least 20 minutes before making image adjustments. (Allow the monitor to warm up for at least 20 minutes before making adjustments.)
- Performing the <Reset> of the <Color> menu returns the color settings to the default settings.
- The values shown in percentages represent the current level within the specific adjustment. They are available only as a reference tool. (To create an uniform white or black screen, the percentages for each will probably not be the same.)
- Direct pressing the Mode Button on the control panel also can show or switch the Color Mode.

#### **Adjustment Contents**

| Menu               | Color     | Mode | Function Descriptions   | Adjustable range  |
|--------------------|-----------|------|---|---|
|                    | Custom    | sRGB |   |   |
| Brightness         | $\sqrt{}$ | V    | To set the brightness of the screen   | 0 ~ 100%  |
| 77                 |           |      | Direct pressing the up and do can adjust the brightness (W does not appear.). After the abutton to save the data.   | hen ScreenManager   |
| Temperature (p.34) | V         | -    | To set the color temperature  | 4,000 ~ 10,000 K<br>in 500 K increments<br>(including 9,300 K).<br>Default setting is off<br>(normal white) |
|                    |           |      | <ul> <li>The values shown in the Kelv reference tool.</li> <li>Setting the temperature under K invalidates the color temperature's setting turns "Color temperature's setting turns"</li> </ul> | er 4,000 K or over 10,000 rature setting. (The color  |

| Menu          | Color      | Mode | Function Descriptions  | Adjustable range   |  |
|---------------|------------|------|--|--|--|
|               | Custo<br>m | sRGB |  |  |  |
| Gamma         | $\sqrt{}$  | -    | To set the gamma value   | 1.8 ~ 2.6  |  |
| (p.34)        |            |      | NOTE   |  |  |
|               |            |      | <ul> <li>If setting the gamma value, the using the monitor in<br/>the digital signal input is recommended.</li> <li>If using the monitor in the analog input signal, set the<br/>gamma value from 1.8 to 2.2.</li> </ul> |  |  |
| Saturation    | V          | -    | To change the saturation   | -128 ~ 127 Setting the minimum level (-128) turns the image to the monochrome.   |  |
|               |            |      | NOTE   |  |  |
|               |            |      | <ul> <li>The <saturation> adjustment<br/>undisplayable color tone.</saturation></li> </ul>   | may cause  |  |
| Hue           | $\sqrt{}$  | -    | To change the flesh color,   | -32 ~ 32   |  |
| ( <b>()</b> ) |            |      | etc.<br>NOTE   |  |  |
|               |            |      | The <hue> adjustment may cause undisplayable color tone.</hue>   |  |  |
| Gain (p.34)   | √          | -    | To change each color (red,   | 0 ~ 100%   |  |
| 0             |            |      | green and blue)  | By adjusting the red, green and blue color tones for each mode, custom colors can be defined. Display a white or gray background image and adjust the <gain>.</gain> |  |
|               |            |      | NOTE   |  |  |
|               |            |      | The values shown in the percentage are available only as a reference tool.   |  |  |
|               |            |      | <ul> <li>Setting the <temperature> (p.34) invalidates the<br/><gain> adjustment. <gain> setting returns to the<br/>default.</gain></gain></temperature></li> </ul>   |  |  |
| Reset         | V          | -    | To return the color settings to the default settings   | Select the "Reset".  |  |

# 5. ATTACHING A STAND

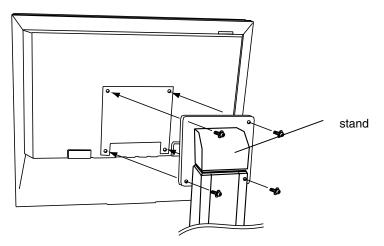
The LCD monitor can be used with other stand by removing the tilt stand and attaching the stand to the LCD monitor.

## NOTE

- When attaching an arm or stand, follow the instructions of their user's manual.
- When using another manufacturer's arm or stand, confirm the following in advance and select one conforming to the VESA standard.
  - Clearance between the screw holes: 100 mm x 100 mm
  - Thickness of plate: 2.6 mm
  - Strong enough to support weight of the monitor unit (except the stand) and attachments such as cables.
- Attach an arm or stand to meet the following tilt angles of the monitor.
  - Up 45 degrees, down 0 degrees (Within operating range)
- Please connect cables after attaching a stand.

## **Setup Procedure**

- **1.** Lay the LCD monitor down. Do not scratch the panel.
- **2.** Remove the tilt stand by loosening the 4 screws.
- **3.** Attach a stand to the LCD monitor securely with the same screws.



4 Mounting Screws: M4 x 12 mm

# 6. TROUBLESHOOTING

If a problem persists even after applying the suggested remedies, contact an EIZO dealer. The latest FAQ information is supplied on EIZO homepage (http://www.eizo.com/).

#### No Picture Problems

| Problems   | Points to check with possible solutions   |  |  |
|--|---|--|--|
| <ul><li>1. No picture</li><li>• Indicator status: Off</li></ul>  | ☐ Check that the power cord is correctly connected. If the problem persists, turn off the monitor power for a few minutes, then turn it back on and try again.    |  |  |
| Indicator status: Blue   | ☐ Check the "Brightness" setting.   |  |  |
| • Indicator status: Yellow Flashing  | <ul> <li>□ Switch the signal input by pressing the Input Signal Selection Button on the front control panel.</li> <li>□ Try pressing the power switch.</li> </ul> |  |  |
| Following messages appear.     (Error messages shown below will remain on the screen for 40                          | These message appear when the signal is not inputted correctly, even if the monitor functions properly.   |  |  |
| seconds.) Signal Check Analog  | ☐ When the image is displayed correctly after a short time, there is no problem with the monitor. (Some PCs do not output the signal soon after powering on.)     |  |  |
| No Signal  | ☐ Check that the PC is turned ON. ☐ Check that the signal cable is properly connected to the PC or graphics board.  |  |  |
|  | ☐ Switch the signal input by pressing the Input Signal Selection Button on the front control panel.   |  |  |
| <ul> <li>Whenever an error signal message<br/>appears, the signal frequency will be<br/>displayed in red.</li> </ul> | ☐ Use the graphics board's utility software to change the frequency setting. (Refer to the manual of the graphics board.)   |  |  |
| Signal Error  Digital  fD: 70.0MHz  fH: 40.0kHz  fV: 60.0Hz  |   |  |  |

## Imaging problems

| Problems   | Points to check with possible solutions   |
|--|---|
| 3. Display position is incorrect.  | □ Adjust the image position using the <position> (p.22) □ The two display modes, VGA 720 x 400 (70 Hz) and 320 x 200 (70 Hz), have the same signal timings. Using this adjustment selects the appropriate display mode. (This function effects only when the resolution is VGA 720 x 400 (70 Hz) or 320 x 200 (70 Hz). □ If the problem persists, use the graphics board's utility software to change the display position if available.</position> |
| 4. Vertical bars of distortion appear.   | ☐ Decrease the vertical bars using the <clock>. (p.21)</clock>  |
| 5. Horizontal bars of distortion appear.   | □ Decrease the horizontal bars using the <phase>. (p.21)</phase>  |
| 6. Letters and lines appear blurred.   | ☐ Switch the <smoothing> mode. (p.22)</smoothing>   |
| 7. The screen is too bright or too dark.   | ☐ Adjust the <contrast and="" brightness=""> (The baklight of the LCD monitor has a fixed life span. When the screen becomes dark or begins to flicker, please consult your dealer.)</contrast>   |
| 8. Afterimages appear.   | ☐ When the screen image is changed after displaying the same image for a long period, an afterimage may appear. The "Afterimage" can be removed gradually by changing the displayed image. Use the "Off Timer" function and avoid keeping the screen on all the time.(p.18)   |
| <ol><li>The screen has defective pixels<br/>(e.g. slightly light or dark).</li></ol> | ☐ This is due to the characteristics of the panel itself, and not the LCD product.  |

## Other problems

| Problems   | Points to check with possible solutions   |  |
|--|---|--|
| 10.The <smoothing> cannot be selected.</smoothing> | □ <smoothing> is disabled when the screen is displayed in the 1280 x 1024.</smoothing>  |  |
| 11.The Enter Button does not operate.              | ☐ The adjustment lock is probably on. To unlock: switch the LCD monitor off. Then, while pressing the Auto Adjustment Button switch, the power on. (p.18) |  |
| 12.The Auto Adjustment Button does not operate.    | ☐ The adjustment lock is probably on. To unlock: switch the LCD monitor off. Then, while pressing the Auto Adjustment Button switch, the power on. (p.18) |  |
|  | ☐ The Auto adjustment function is intended for use on the AT-compatible PC running Windows. It may not work properly in either of the following cases.    |  |
|  | When running an AT-compatible PC on MS-DOS (Not windows).   |  |
|  | <ul> <li>The background color for the "wall paper"<br/>or "desktop" pattern is set to black.</li> </ul>   |  |
|  | ☐ Some signals from a graphics board may not function properly.   |  |

## Touch Panel Problems

| Problems   | Points to check with possible solutions   |  |  |
|--|---|--|--|
| 13.Cursor is jittery. / Drawing lines are not straight and smooth. | ☐ The influence of metal may cause jittery cursor. ☐ When multiple monitors are placed close to each other, leave space between monitors. |  |  |

| Problems   | Points to check with possible solutions   |
|--|---|
| 14.Cursor position is not correct. / Cursor jumps. | ☐ When cursor position is incorrect or cursor jumps, turn off and on the monitor. If the symptom is not improved, perform the calibration on the monitor. |
|  | <ul> <li>Do not touch the screen while turning on the<br/>PC and the monitor. Touch the screen one<br/>second later after appearing the image.</li> </ul> |
|  | <ul> <li>Changing the position or angle of the<br/>monitor will cause cursor jump.</li> </ul>   |
|  | ☐ The drawing touch and dragging the fi nger on the touch panel to draw the picture may cause incorrect cursor position.                                  |
|  | ☐ Keep metals away from the panel surface.  |
|  | ☐ Touch with one finger only. Keep other fingers away from the touch screen. Do not rest the hand in the monitor or bezel while touching the screen.      |
|  | ☐ The spray for preventing static electricity may infl uences the sensibility of the touch panel. Do not use it on cleaning.                              |
| 15.No touch sound.                                 | ☐ Under Windows 7, touch sound is only output through the audio output terminal of the PC. To hear touch sound, connect speakers.                         |
|  | ☐ The touch sound may not be output from the external line out of the PC depending on the hardware configuration.   |

# 7. CLEANING

Periodic cleaning is recommended to keep the monitor looking new and to prolong its operation lifetime.

#### NOTE

- Chemicals such as alcohol and antiseptic solution may cause gloss variation, tarnishing, and fading of the cabinet or panel, and also quality deterioration of the image.
- Never use any thinner, benzene, wax, and abrasive cleaner, which may damage the cabinet or panel.
- Do not allow liquid to enter the clearance between the panel and the panel frame.
- The optional ScreenCleaner is recommended for cleaning the panel surface.

If necessary, the stains on the cabinet and panel surface can be removed by moistening part of a soft cloth with water.

# 8. SPECIFICATIONS

| LCD Panel                    |                     | 48 cm (19.0 inch), TFT color LCD panel with Anti-Glare Hard Coating, Viewing Angle: H: 178°, V: 178° (CR≥10) |  |  |  |  |
|------------------------------|---------------------|--|--|--|--|--|
| Dot Pitch                    |                     | 0.294 mm   |  |  |  |  |
| Horizontal Scan              | Frequency           | Analog: 30 ~ 81 kHz (Non-interlace)<br>Digital: 30 ~ 65 kHz  |  |  |  |  |
| Vertical Scan Fro            | equency             | Analog: 49.5 ~ 75.5 Hz (Non-interlace)<br>Digital: 59 ~ 61 Hz, (VGA Text : 70Hz)                             |  |  |  |  |
| Resolution                   |                     | 1 M pixels (1280 dots x 1024 lines)  |  |  |  |  |
| Dot Clock (Max.)             | )                   | Analog: 135 MHz<br>Digital: 109 MHz  |  |  |  |  |
| Display Colors               |                     | 16 million colors (max.)   |  |  |  |  |
| Display Area                 |                     | 376.3 mm (H) ×301.0 mm (V) (13.7" (H) x 11.0" (V)) (Viewable image size: 481 mm (18.9"))                     |  |  |  |  |
| Touch Panel                  | os                  | Microsoft Windows 7 (32 bit/64 bit)  |  |  |  |  |
|                              |                     | Microsoft Windows Vista Service Pack 2 (32 bit)  |  |  |  |  |
|                              |                     | Microsoft Windows XP Service Pack 3 (32 bit)   |  |  |  |  |
|                              |                     | (Not compatible with Mac OS)   |  |  |  |  |
|                              | Communication       | RS-232C serial   |  |  |  |  |
|                              | protocol            |  |  |  |  |  |
|                              | Detective<br>method | Analog capacitive technology, finger touch   |  |  |  |  |
| Power Supply                 |                     | 100-120/200-240 VAC±10%, 50/60 Hz, 0.65-0.55 A/0.4-0.35 A  |  |  |  |  |
| Power Consump                | tion                | Max.: 40 W   |  |  |  |  |
| Input Connector              |                     | D-Sub mini 15 pin, DVI-D   |  |  |  |  |
| Analog Input Sig             | ınal (Sync)         | Separate, TTL, Positive/Negative   |  |  |  |  |
| Analog Input Sig             | ınal (Video)        | 0.7Vp-p/75 $\Omega$ Positive   |  |  |  |  |
| Input Signal (Dig            | jital)              | TMDS (Single Link)   |  |  |  |  |
| Signal registration          | on                  | Analog: 45 (Factory preset: 22)  |  |  |  |  |
| Plug & Play                  |                     | VESA DDC 2B  |  |  |  |  |
| Dimensions                   | with stand          | 414 mm (W) x 442.5 ~524.5mm(H) x 208.5 mm (D) (16.3"(W) x 17.4" ~ 20.6"(H) x 8.2"(D))                        |  |  |  |  |
|                              | without stand       | 414 mm (W) x 340 mm (H) x 64 mm (D)<br>(16.3"(W) x 13.4"(H) x 2.52" (D))                                     |  |  |  |  |
| Weight                       | with stand          | 9.0 kg (19.8 lbs.)   |  |  |  |  |
|                              | without stand       | 6.0 kg (13.2 lbs.)   |  |  |  |  |
| Environment conditions       | Temperature         | Operating: 0 °C ~ 35 °C (32 °F ~ 95 ° F)  Transportation/Storage: -20 °C ~ 60 °C (-4 °F ~ 140 ° F)           |  |  |  |  |
|                              | Humidity            | 30% to 80% R.H. Non-condensing   |  |  |  |  |
|                              | Pressure            | 860 to 1,060 hPa   |  |  |  |  |
| Certifications and Standards |                     |  |  |  |  |  |
| 100-120 VAC                  |                     | CB, NRTL/C-TÜV, FCC-B  |  |  |  |  |
| 200-240 VAC                  |                     | CE(93/42/EEC), CB, TÜV Rheinland/GM  |  |  |  |  |
| 200-240 VAC                  |                     | OL(30/42/EEO), OD, TOV DHEIHIAHU/GIVI  |  |  |  |  |

| Classification of Equipment | Type of protection against electric shock : Class I<br>EMC class : EN60601-1-2:2007 Group1 Class B<br>Classification of medical device (MDD 93/42/EEC) : Class I |
|-----------------------------|--|
|                             | Mode of operation : Continuous   |
|                             | IP Class : IPX0  |

## **Default settings**

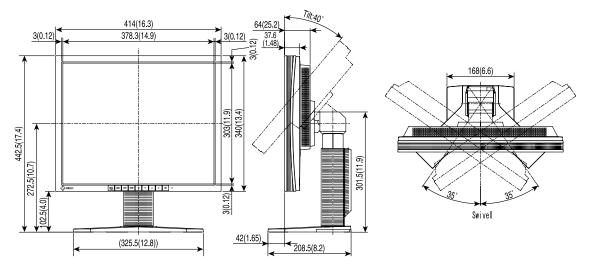
| Brightness   | 100%                               |  |
|--------------|------------------------------------|--|
| Smoothing    | 3                                  |  |
| Temperature  | Off (normal white: approx. 6500 K) |  |
| Input Signal | Auto                               |  |
| Off Timer    | Disable                            |  |
| Language     | English                            |  |

## **Optional**

| Touch Panel Pointer | TP1 |
|---------------------|-----|

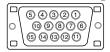
## **Dimensions**

## Unit mm (inches)



## **Pin Assignment**

## D-Sub mini 15 pin connector



| Pin<br>No. | Signal      | Pin<br>No. | Signal         | Pin<br>No. | Signal         |
|------------|-------------|------------|----------------|------------|----------------|
| 1          | Red video   | 6          | Red ground     | 11         | Ground Shorted |
| 2          | Green video | 7          | Green ground   | 12         | Data (SDA)     |
| 3          | Blue video  | 8          | Blue ground    | 13         | H. Sync        |
| 4          | Ground      | 9          | No pin         | 14         | V. Sync        |
| 5          | No pin      | 10         | Ground Shorted | 15         | Clock (SCL)    |

#### **DVI-D Connector**



| Pin<br>No. | Signal                  | Pin<br>No. | Signal                 | Pin<br>No. | Signal                 |
|------------|-------------------------|------------|------------------------|------------|------------------------|
| 1          | TMDS Data2-             | 9          | TMDS Data1-            | 17         | TMDS Data0-            |
| 2          | TMDS Data2+             | 10         | TMDS Data1+            | 18         | TMDS Data0+            |
| 3          | TMDS Data2/4<br>Shield  | 11         | TMDS Data1/3<br>Shield | 19         | TMDS Data0/5<br>Shield |
| 4          | NC*                     | 12         | NC                     | 20         | NC                     |
| 5          | NC                      | 13         | NC                     | 21         | NC                     |
| 6          | DDC Clock (SCL)         | 14         | +5V Power              | 22         | TMDS Clock shield      |
| 7          | DDC Data (SDA)          | 15         | Ground (For +5V)       | 23         | TMDS Clock+            |
| 8          | Analog Vertical<br>Sync | 16         | Hot Plug Detect        | 24         | TMDS Clock-            |

(\*NC: No Connection)

## RS-232C Port (Mini DIN 6 pin)



| Pin No. | Signal |
|---------|--------|
| 1       | RXD    |
| 2       | RTS    |
| 3       | CTS    |
| 4       | GND    |
| 5       | TXD    |
| 6       | GND    |

# 9. GLOSSARY

#### Clock

With the analog input signal display, the analog signal is converted to a digital signal by the LCD circuitry. To convert the signal correctly, the LCD monitor needs to produce the same number clock pulse as the dot clock of the graphics system. When the clock pulse is not correctly set, some vertical bars of distortion are displayed on the screen.

## **Color Temperature (Temperature)**

Color Temperature is a method to measure the white color tone, generally indicated in degrees Kelvin. At high temperatures the white tone appears somewhat blue, while at lower temperatures it appears somewhat red. Computer monitors generally give best performance at high temperature settings.

5,000 K: Slightly reddish white.

6,500 K: Warm-white tone, similar to white paper or daylight.

9,300 K: Slightly bluish white.

#### DVI

(Digital Visual Interface)

A digital flat panel interface. DVI can transmit digital data from the PC directly without loss with the signal transition method "TMDS".

There are two kinds of DVI connectors. One is DVI-D connector for digital signal input only. The other is DVI-I connector for both digital and analog signal inputs.

#### Gain Adjustment

Adjusts each color parameter for red, green and blue. The color of the LCD monitor is displayed through the color filter of the LCD panel. Red, green and blue are the three primary colors. The colors on the monitor are displayed by combining these three colors. The color tone can change by adjusting the illumination amount passed through each color's filter.

#### Gamma

Generally, the relationship that the light intensity values of a monitor change nonlinearly to the input signal level is called "Gamma Characteristic". On the monitor, low gamma values display the whitish images and high gamma values display the high contrast images.

#### **Phase**

The phase adjustment decides the sampling timing point for converting the analog input signal to a digital signal. Adjusting the phase after the clock adjustment will produce a clear screen.

#### **Range Adjustment**

The Range Adjustment controls the level of output signal range to display the whole color gradation.

#### Resolution

The LCD panel consists of a fixed number of pixel elements which are illuminated to form the screen image. The display panel of this monitor consists of 1280 horizontal pixels and 1024 vertical pixels. At a resolution of 1280 x 1024, images are displayed as a full screen (1:1).

#### sRGB (Standard RGB)

"International Standard for Red, Green, and Blue color space" A color space was defined with the aim of the color matching between applications and hardware devices, such as monitors, scanners, printers and digital cameras. As a standard default space, sRGB allows Internet users to closely match colors.

#### **TMDS**

(Transition Minimized Differential Signaling)

A signal transition method for the digital interface.

# APPENDIX/ANHANG/ANNEXE

#### Preset Timing Chart for Analog input Timing-Übersichten für Analog Eingang Synchronisation des Signaux pour Analog numerique

Based on the signal diagram shown below 16 factory presets have been registered in the monitor's microprocessor.

Der integrierte Mikroprozessor des Monitors unterstützt 16 werkseitige Standardeinstellungen (siehe hierzu die nachfolgenden Diagramme).

16 signaux ont été enregistrés en usine dans le microprocesseur du moniteur, conformément au diagramme de synchronisation ci-dessous.

|                         | Dot Clock<br>MHz | Sync Polarity |       | Frequencies |       |
|-------------------------|------------------|---------------|-------|-------------|-------|
| Mode                    |                  | Н             | V     | H kHz       | V Hz  |
| VGA Mode13<br>320 × 200 | 25.2             | Nega.         | Nega. | 31.47       | 59.94 |
| VGA<br>640 × 480        | 25.2             | Nega.         | Nega. | 31.47       | 59.94 |
| VGA<br>720 × 400        | 28.3             | Nega.         | Posi. | 31.47       | 70.09 |
| VESA<br>640 × 480       | 31.5             | Nega.         | Nega. | 37.86       | 72.81 |
| VESA<br>640 × 480       | 31.5             | Nega.         | Nega. | 37.50       | 75.00 |
| VESA<br>800 × 600       | 36.0             | Posi.         | Posi. | 35.16       | 56.25 |
| VESA<br>800 × 600       | 40.0             | Posi.         | Posi. | 37.88       | 60.32 |
| VESA<br>800 × 600       | 50.0             | Posi.         | Posi. | 48.08       | 72.19 |
| VESA<br>800 × 600       | 49.5             | Posi.         | Posi. | 46.88       | 75.00 |
| VESA<br>1024 × 768      | 65.0             | Nega.         | Nega. | 48.36       | 60.00 |
| VESA<br>1024 × 768      | 75.0             | Nega.         | Nega. | 56.48       | 70.07 |
| VESA<br>1024 × 768      | 78.8             | Posi.         | Posi. | 60.02       | 75.03 |
| VESA<br>1152×864        | 108.0            | Posi.         | Posi. | 67.50       | 75.00 |
| VESA<br>1280×960        | 108.0            | Posi.         | Posi. | 60.00       | 60.00 |
| VESA<br>1280×1024       | 108.0            | Posi.         | Posi. | 63.98       | 60.02 |
| VESA<br>1280×1024       | 135.0            | Posi.         | Posi. | 79.98       | 75.03 |

## **EMC Information**

Essential performance of FlexScan L760T-C is to display images and operate functions normally.



The FlexScan L760T-C requires special precautions regarding EMC and need to be installed, put into service and used according to the following information.

Do not use any cables other than the cables that provided or specified by us. Using other cables may cause the increase of emission or decrease of immunity.

Do not put any portable and mobile RF communications equipment close to the FlexScan L760T-C. Doing so may affect the FlexScan L760T-C.

The FlexScan L760T-C should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it will be used.

| Guidance and mar  | Guidance and manufacturer's declaration - electromagnetic emissions |   |  |  |
|---|---|---|--|--|
| The FlexScan L760T-C is intended for use in the electromagnetic environment specified below. The customer or the user of the FlexScan L760T-C should assure that it is used in such an environment. |   |   |  |  |
| Emission test   | Compliance  | Electromagnetic environment - guidance  |  |  |
| RF emissions<br>EN55011   | Group 1   | The FlexScan L760T-C uses RF energy only for its internal function.  Therefore, its RF emission are very low and are not likely to cause any interference in nearby electronic equipment. |  |  |
| RF emissions<br>EN55011   | Class B   | The FlexScan L760T-C is suitable for use in all establishments, including domestic establishments and those directly connected  |  |  |
| Harmonic emissions<br>EN61000-3-2   | Not applicable  | to the public low-voltage power supply network that supplies buildings used for domestic purposes.  |  |  |
| Voltage fluctuations /<br>flicker emissions<br>EN61000-3-3  | Complies  |   |  |  |

| Guidance and man  | Guidance and manufacturer's declaration - electromagnetic immunity  |   |  |  |  |
|---|---|---|--|--|--|
| The FlexScan L760T-C is intended for use in the electromagnetic environment specified below. The customer or the user of the FlexScan L760T-C should assure that it is used in such an environment. |   |   |  |  |  |
| Immunity test   | IEC60601 test level   | Compliance level  | Electromagnetic environment - guidance   |  |  |
| Electrostatic<br>discharge (ESD)<br>EN61000-4-2   | ±6kV contact<br>±8kV air  | ±6kV contact<br>±8kV air  | Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.  |  |  |
| Electrical fast<br>transient / burst<br>EN61000-4-4   | ±2kV<br>for power supply lines<br>±1kV<br>for input/output lines  | ±2kV<br>for power supply lines<br>±1kV<br>for input/output lines  | Mains power quality should be that of a typical commercial or hospital environment.  |  |  |
| Surge<br>EN61000-4-5  | ±1kV line(s) to line(s)<br>±2kV line(s) to earth  | ±1kV line(s) to line(s)<br>±2kV line(s) to earth  | Mains power quality should be that of a typical commercial or hospital environment.  |  |  |
| Voltage dips, short<br>interruptions and<br>voltage variations on<br>power supply input<br>lines<br>EN61000-4-11  | <5% UT (>95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT (>95% dip in UT) for 5sec | <5% UT (>95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT (>95% dip in UT) for 5sec | Mains power quality should be that of a typical commercial or hospital environment. If the user of the FlexScan L760T-C requires continued operation during power mains interruptions, it is recommended that the FlexScan L760T-C be powered from an uninterruptible power supply or a battery. |  |  |
| Power frequency<br>(50/60Hz)<br>magnetic field<br>EN61000-4-8   | 3A/m  | 3A/m  | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.  |  |  |

NOTE UT is the a.c. mains voltage prior to application of the test level.

#### Guidance and manufacturer's declaration - electromagnetic immunity

The FlexScan L760T-C is intended for use in the electromagnetic environment specified below. The customer or the user of the FlexScan L760T-C should assure that it is used in such an environment.

| Immunity test   | IEC60601 test level                                 | Compliance level | Electromagnetic environment - guidance  |
|---|---|------------------|---|
| Conducted RF<br>EN61000-4-6<br>Radiated RF<br>EN61000-4-3 | 3Vrms<br>150kHz to 80MHz<br>3V/m<br>80MHz to 2.5GHz | 3V<br>3V/m       | Portable and mobile RF communications equipment should be used no closer to any part of the FlexScan L760T-C, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. |
|   |   |                  | Recommended Separation distance $d = 1.2 \sqrt{P}$  |
|   |   |                  | d = $1.2 \sqrt{P}$ , 80MHz to 800MHz<br>d = $2.3 \sqrt{P}$ , 800MHz to 2.5GHz   |
|   |   |                  | Where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and "d" is the recommended separation distance in meters (m).  |
|   |   |                  | Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey <sup>a</sup> , should be less than the compliance level in each frequency range <sup>b</sup> .  |
|   |   |                  | Interference may occur in the vicinity of equipment marked with the following symbol.   |

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

<sup>&</sup>lt;sup>a</sup> Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the FlexScan L760T-C is used exceeds the applicable RF compliance level above, the FlexScan L760T-C should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the FlexScan L760T-C. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

# Recommended separation distances between portable and mobile RF communications equipment and the FlexScan L760T-C

The FlexScan L760T-C is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the FlexScan L760T-C can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the FlexScan L760T-C as recommended below, according to the maximum output power of the communications equipment.

| Rated maximum output power of transmitter | Separation distance according to frequency of transmitter m |  |                                     |  |
|---|---|--|-------------------------------------|--|
| W   | $150$ kHz to $80$ MHz d = $1.2 \sqrt{P}$                    | $80MHz$ to $800MHz$ d = $1.2 \sqrt{P}$ | 800MHz to 2.5GHz $d = 2.3 \sqrt{P}$ |  |
| 0.01                                      | 0.12  | 0.12                                   | 0.23                                |  |
| 0.1                                       | 0.38  | 0.38                                   | 0.73                                |  |
| 1   | 1.2   | 1.2                                    | 2.3                                 |  |
| 10  | 3.8   | 3.8                                    | 7.3                                 |  |
| 100                                       | 12  | 12                                     | 23                                  |  |

For transmitters rated at a maximum output power not listed above, the recommended separation distance "d" in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

| Cable length           |           |      |
|------------------------|-----------|------|
| Power Cord:            | Accessary | 2.0m |
| Signal Cable (MD-C87): | Accessary | 2.0m |
| Serial Cable (FD-C38): | Accessary | 1.8m |
| Signal Cable (FD-C39): | Option    | 2.0m |

#### Hinweise zur Auswahl des richtigen Schwenkarms für Ihren Monitor

Dieser Monitor ist für Bildschirmarbeitsplätze vorgesehen. Wenn nicht der zum Standardzubehör gehörige Schwenkarm verwendet wird, muss statt dessen ein geeigneter anderer Schwenkarm installiert werden. Bei der Auswahl des Schwenkarms sind die nachstehenden Hinweise zu berücksichtigen:

Der Standfuß muß den nachfolgenden Anforderungen entsprechen:

- a) Der Standfuß muß eine ausreichende mechanische Stabilität zur Aufnahme des Gewichtes vom Bildschirmgerät und des spezifizierten Zubehörs besitzen. Das Gewicht des Bildschirmgerätes und des Zubehörs sind in der zugehörenden Bedienungsanleitung angegeben.
- b) Die Befestigung des Standfusses muß derart erfolgen, daß die oberste Zeile der Bildschirmanzeige nicht höher als die Augenhöhe eines Benutzers in sitzender Position ist.
- c) Im Fall eines stehenden Benutzers muß die Befestigung des Bildschirmgerätes derart erfolgen, daß die Höhe der Bildschirmmitte über dem Boden zwischen 135 150 cm beträgt.
- d) Der Standfuß muß die Möglichkeit zur Neigung des Bildschirmgerätes besitzen (max. vorwärts: 5°, min. nach hinten ≥ 5°).
- e) Der Standfuß muß die Möglichkeit zur Drehung des Bildschirmgerätes besitzen (max. ± 180°). Der maximale Kraftaufwand dafür muß weniger als 100 N betragen.
- f) Der Standfuß muß in der Stellung verharren, in die er manuell bewegt wurde.
- g) Der Glanzgrad des Standfusses muß weniger als 20 Glanzeinheiten betragen (seidenmatt).
- h) Der Standfuß mit Bildschirmgerät muß bei einer Neigung von bis zu 10° aus der normalen aufrechten Position kippsicher sein.

#### **Recycling Information**

This product, when disposed of, is supposed to be collected and recycled according to your country's legislation to reduce environmental burden. When you dispose of this product, please contact a distributor or an affiliate in your country.

The contact addressees are listed on the EIZO website below.

http://www.eizo.com

For recycling information for customers in Switzerland, please refer to the following website. http://www.swico.ch

### Informationen zum Thema Recycling

Dieses Produkt muss gemäß den Vorschriften Ihres Landes zur Entlastung der Umwelt recyclet werden. Wenden Sie sich bei der Entsorgung dieses Produkts an einen Verteiler oder eine Tochtergesellschaft in Ihrem Land.

Die Adressen zur Kontaktaufnahme sind auf der unten angegebenen Website von EIZO aufgeführt. http://www.eizo.com

Kunden in der Schweiz entnehmen Informationen zum Recycling der folgenden Website: http://www.swico.ch

### Informations sur le recyclage

Ce produit doit être jeté aux points de collecte prévus à cet effet et recyclé conformément à la législation de votre pays, afin de réduire l'impact sur l'environnement. Lorsque vous jetez ce produit, veuillez contacter un distributeur ou une société affiliée de votre pays.

Les adresses des distributeurs sont répertoriées sur le site Web EIZO ci-dessous.

http://www.eizo.com

Pour les clients en Suisse, veuillez consulter le site Web suivant afin d'obtenir des informations sur le recyclage.

http://www.swico.ch

## Información sobre reciclaje

Este producto debe desecharse y reciclarse según la legislación del país para reducir el impacto medioambiental. Cuando desee deshacerse de este producto, póngase en contacto con un distribuidor o una filial de su país.

Encontrará las direcciones de contacto en el sitio web de EIZO que se indica a continuación.

http://www.eizo.com

#### Informazioni sul riciclaggio

Per lo smaltimento e il riciclaggio del presente prodotto, attenersi alle normative vigenti nel proprio paese per ridurre l'impatto ambientale. Per lo smaltimento, rivolgersi ad un distributore o un affiliato presenti nel proprio paese.

Gli indirizzi sono elencati nel sito Web EIZO riportato di seguito.

http://www.eizo.com

Per informazioni sul riciclaggio per i clienti in Svizzera, consultare il sito Web riportato di seguito. http://www.swico.ch

## **Atervinningsinformation**

När denna produkt kasseras ska den hanteras och återvinnas enligt landets föreskrifter för att reducera miljöpåverkan. När du kasserar produkten ska du kontakta en distributör eller representant i ditt land. Kontaktadresserna listas på EIZO-webbplatsen nedan. http://www.eizo.com

### Πληροφορίες ανακύκλωσης

Το προϊόν αυτό, όταν απορρίπτεται, πρέπει να συλλέγεται και να ανακυκλώνεται σύμφωνα με τη νομοθεσία της χώρας σας έτσι ώστε να μην επιβαρύνει το περιβάλλον. Για να απορρίψετε το προϊόν, επικοινωνήστε με έναν αντιπρόσωπο ή μια θυγατρική εταιρεία στη χώρα σας. Οι διευθύνσεις επικοινωνίας αναγράφονται στην τοποθεσία web της EIZO παρακάτω. http://www.eizo.com

#### Сведения по утилизации

По истечении срока службы данного продукта его следует принести на сборный пункт и утилизировать в соответствии с действующими предписаниями в вашей стране, чтобы уменьшить вредное воздействие на окружающую среду. Прежде чем выбросить данный продукт, обратитесь к дистрибьютору или в местное представительство компании в вашей стране. Контактные адреса можно найти на веб-узле EIZO. http://www.eizo.com

## Informatie over recycling

Wanneer u dit product wilt weggooien, moet het uit milieu-overwegingen worden verzameld en gerecycled volgens de betreffende wetgeving van uw land. Wanneer u dit product wilt weggooien, moet u contact opnemen met een distributeur of een partner in uw land.

De contactadressen worden vermeld op de volgende EIZO-website. http://www.eizo.com

## Informação sobre reciclagem

Este produto, quando o deitar fora, deve ser recolhido e reciclado de acordo com a legislação do seu país para reduzir a poluição. Quando deitar fora este produto, contacte um distribuidor ou uma filial no seu país.

Os endereços de contacto estão listados no website do EIZO, abaixo. http://www.eizo.com

### Oplysninger om genbrug

Dette produkt forventes ved bortskaffelse at blive indsamlet og genbrugt i overensstemmelse med lovgivningen i dit land for at reducere belastningen af miljøet. Når du bortskaffer denne produkt, skal du kontakte en distributør eller et tilknyttet selskab i dit land.

Adresserne på kontaktpersonerne er angivet på EIZO's websted nedenfor. http://www.eizo.com

#### Kierrätystä koskevia tietoja

Tuote tulee hävittää kierrättämällä maan lainsäädännön mukaisesti ympäristön kuormittumisen vähentämiseksi. Kun hävität tuotteen, ota yhteyttä jälleenmyyjään tai tytäryhtiöön maassasi. Yhteystiedot löytyvät EIZOn Internet-sivustolta. http://www.eizo.com

### Wykorzystanie surowców wtórnych

Ten produkt po zużyciu powinien być zbierany i przetwarzany zgodnie z krajowymi przepisami dotyczącymi ochrony środowiska. Wyrzucając ten produkt, należy skontaktować się z lokalnym dystrybutorem lub partnerem. Adresy kontaktowe można znaleźć we wskazanej poniżej witrynie internetowej firmy EIZO.

http://www.eizo.com

## Informace o recyklaci

Při likvidaci produktu musí být produkt vyzvednut a recyklován podle zákonů příslušné země, aby nedocházelo k zatěžování životního prostředí. Zbavujete-li se produktu, kontaktujte distributora nebo pobočku ve své zemi. Kontaktní adresy jsou uvedeny na následující webové stránce společnosti EIZO. http://www.eizo.com

### Ringlussevõtu alane teave

Keskkonnakoormuse vähendamiseks tuleks kasutatud tooted kokku koguda ja võtta ringlusse vastavalt teie riigi seadustele. Kui kõrvaldate käesoleva toote, võtke palun ühendust turustaja või filiaaliga oma riigis.

Kontaktisikud on toodud EIZO veebilehel järgmisel aadressil:

http://www.eizo.com

## Újrahasznosítási információ

Jelen terméket, amikor eldobjuk, az illető ország törvényei alapján kell összegyűjteni és újrahasznosítani, hogy csökkentsük a környezet terhelését. Amikor ezt a terméket eldobja, kérjük lépjen kapcsolatba egy országon belüli forgalmazóval vagy társvállalkozással.

A kapcsolat címei az EIZO alábbi weboldalán találhatók felsorolva:

http://www.eizo.com

#### Podatki o recikliranju

Ob koncu uporabe odslužen izdelek izročite na zbirno mesto za recikliranje v skladu z okoljevarstveno zakonodajo vaše države. Prosimo, da se pri odstranjevanju izdelka obrnete na lokalnega distributerja ali podružnico.

Kontaktni naslovi so objavljeni na spodaj navedenih spletnih straneh EIZO:

http://www.eizo.com

#### Informácie o recyklácii

Pri likvidácii musí byť tento výrobok recyklovaný v súlade s legislatívou vašej krajiny, aby sa znížilo zaťaženie životného prostredia. Keď sa chcete zbaviť tohto výrobku, kontaktujte prosím distribútora alebo pobočku vo vašej krajine.

Zoznam kontaktných adries je uvedený na nasledovnej webovej stránke firmy EIZO:

http://www.eizo.com

#### Pārstrādes informācija

Utilizējot šo produktu, tā savākšana un pārstrāde veicama atbilstoši jūsu valsts likumdošanas prasībām attiecībā uz slodzes uz vidi samazināšanu. Lai veiktu šī produkta utilizāciju, sazinieties ar izplatītāju vai pārstāvniecību jūsu valstī.

Kontaktadreses ir norādītas zemāk minētajā EIZO tīmekļa vietnē.

http://www.eizo.com

### Informacija apie grąžinamąjį perdirbimą

Šalinant (išmetant) šiuos gaminius juos reikia surinkti ir perdirbti grąžinamuoju būdu pagal jūsų šalies teisės aktus, siekiant sumažinti aplinkos teršimą. Kai reikia išmesti šį gaminį, kreipkitės į jūsų šalyje veikiančią gaminių pardavimo atstovybę arba jos filialą.

Kontaktiniai adresatai nurodyti EIZO interneto svetainėje.

http://www.eizo.com

### Информация относно рециклиране

При изхвърлянето на този продукт се предлага събирането и рециклирането му съобразно законите на вашата страна за да се намали замърсяването на околната среда. Когато искате да се освободите от този продукт, моля свържете се с търговския му представител или със съответните органи отговарящи за това във вашата страна.

Данните за връзка с нас са описани на следния Интернет сайт на EIZO: http://www.eizo.com

## Informație referitoare la reciclare

Acest produs, când debarasat, trebuie colectat și reciclat conform legislației țării rspective ca să reducem sarcina mediului. Când se debarasează de acest produs, vă rugăm să contactați un distribuitor sau un afiliat al țării respective.

Adresele de contact le găsiți pe pagina de web al EIZO:

http://www.eizo.com

## معلومات عن اعادة التدوير

عند التخلص من هذا المنتج، من الضروري تجميعه واعادة تدويره وفقاً للقوانين المتبعة في بلدك لتقليل العبء المسلط على البيئة. عندما تتخلص من هذا المنتج، يرجى الاتصال بموزع أو طرف منتسب إليه في بلدك. عناوين الاتصال مدرجة في موقع ايزو EIZO ادناه على شبكة الانترنت.

http://www.eizo.com

## Geri Dönüşüm Bilgisi

Bu ürünün, atılacağı zaman, ülkenizin çevre kirliliğinin azaltılması konusundaki mevzuatına göre toplanması ve yeniden değerlendirilmesi gerekmektedir. Ürünü atacağınız zaman lütfen ülkenizdeki bir distribütör veya ilgili kurulusla temasa geciniz.

İrtibat adresleri aşağıdaki EIZO web sitesinde verilmiştir.

http://www.eizo.com



#### **EIZ** Corporation

153 Shimokashiwano, Hakusan, Ishikawa 924-8566 Japan Phone: +81 76 277 6792 Fax: +81 76 277 6793

#### 艺卓显像技术(苏州)有限公司

中国苏州市苏州工业园区展业路8号中新科技工业坊5B Phone: +86 512 6252 0100 Fax: +86 512 6252 1508

EC REP

#### **EIZO** GmbH

Siemensallee 84, 76187 Karlsruhe, Germany Phone: +49 721 20321 0 Fax: +49 721 20321 471